Serial No. 10/500,986
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Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (currently amended) A chemical-mechanical polishing process for substrates used in the micro[[-]]electronics semiconductors industry comprising at least one metal layer and one insulator layer, optionally separated~~, if necessary,~~ by a barrier layer, in which the metal layer or layers and the barrier layer or layers are subjected to friction using a polishing pad by moving the substrate with respect to the pad and by pressing the substrate against said pad, and an abrasive composition is deposited on the pad during the polishing, wherein said process is carried out in a single stage, said abrasive composition comprising:

- an acid aqueous suspension of individualized particles of colloidal silica, not linked to each other by siloxane bonds, having a mean particle diameter of between 5 and 20 nm, and having a concentration by weight of silica of between 1 and 10%, and
- an oxidizing agent,

and in that the metal layer and~~, if applicable,~~ the optional barrier layer, is or are eliminated from the surface of the insulator in order to obtain a metal and insulator surface not requiring any finishing polishing.

2. (previously presented) A chemical-mechanical polishing process according to claim 1, wherein the metal layer is produced from a metal selected from the group consisting of aluminum, copper and tungsten, and that the barrier layer is produced from a material selected from the group consisting of titanium, tantalum, titanium nitride, tantalum nitride and any combination or alloy of at least two of them.

3. (previously presented) A chemical-mechanical polishing process according to claim 1 wherein the insulator layer is selected from the group consisting of silicon oxide, tetraethoxysilane oxide, phosphosilicate glass, borophosphosilicate glass and polymers with a low dielectric constant.

4. (previously presented) A chemical-mechanical polishing process according to claim 1, wherein the oxidizing agent is an iodate.

5. (previously presented) A chemical-mechanical polishing process according to claim 1, wherein the mean diameter of the individualized particles of colloidal silica, not linked to each other by siloxane bonds, is between 7 and 15 nm.

6. (previously presented) A chemical-mechanical polishing process according to claim 1, wherein the acid aqueous suspension of colloidal silica is used at a pH of between 1 and 5.

7. (previously presented) An abrasive composition for the chemical-mechanical polishing in one stage of substrates used in the microelectronics semiconductors industry containing at least one metal layer and one insulator layer, wherein said abrasive composition comprises:

- an acid aqueous suspension of individualized particles of colloidal silica, not linked to each other by siloxane bonds, having a mean particle diameter of between 5 and 20 nm, and having a concentration by weight of silica of between 1 and 10%, and
- an oxidizing agent,

and the abrasive composition is substantially free of anti-corrosion agent (< 0.05 % by weight).

8. (previously presented) A composition according to claim 7, wherein the oxidizing agent is an iodate.

9. (previously presented) A composition according to claim 7, wherein the mean diameter of the individualized particles of colloidal silica, not linked to each other by siloxane bonds, is between 7 and 15 nm.

10. (previously presented) A composition according to claim 7, wherein the acid aqueous suspension of colloidal silica has a concentration by weight of silica of between 2 and 5%.

11. (previously presented) A chemical-mechanical polishing process according to claim 4, wherein the iodate is selected from the group consisting of potassium iodate and sodium iodate.

12. (previously presented) A chemical-mechanical polishing process according to claim 1, wherein the oxidizing agent is used at a concentration by weight of between 0.1 and 15%.

13. (previously presented) A chemical-mechanical polishing process according to claim 12, wherein the oxidizing agent is used at a concentration by weight of between 2 and 5%.

14. (previously presented) A chemical-mechanical polishing process according to claim 5, wherein the mean diameter of the individualized particles of colloidal silica, not linked to each other by siloxane bonds, is between 9 and 12 nm.

15. (previously presented) A chemical-mechanical polishing process according to claim 1, wherein the acid aqueous suspension of colloidal silica is used at a concentration by weight of silica of between 2 and 5%.

16. (previously presented) A chemical-mechanical polishing process according to claim 6, wherein the acid aqueous suspension of colloidal silica is used at a pH of between 1.5 and 3.

17. (previously presented) A composition according to claim 8 wherein the iodate is selected from the group consisting of potassium iodate and sodium iodate.

18. (previously presented) A composition according to claim 7 wherein the oxidizing agent is used at a concentration by weight of between 0.1 and 15%.

19. (previously presented) A composition according to claim 18, wherein the oxidizing agent is used at a concentration by weight of between 2 and 5%.

20. (previously presented) A composition according to claim 9, wherein the mean diameter of the individualized particles of colloidal silica, not linked to each other by siloxane bonds, is between 9 and 12 nm.

21. (previously presented) A composition according to claim 7 wherein the acid aqueous suspension of colloidal silica has a pH of between 1 and 5.

22. (previously presented) A composition according to claim 21 wherein the acid aqueous suspension of colloidal silica has a pH of between 1.5 and 3.